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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/709,431

05/05/2004

Yi-Lun Chou

12767-US-PA

3430

31561

7590

08/05/2005

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE  
7 FLOOR-1, NO. 100  
ROOSEVELT ROAD, SECTION 2  
TAIPEI, 100  
TAIWAN

EXAMINER

CHIEN, LUCY P

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/709,431	<b>Applicant(s)</b> CHOU ET AL.	
	<b>Examiner</b> Lucy P. Chien	<b>Art Unit</b> 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/5/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**Claim 1-6,9-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art (admission) in view of Ikeda et al (US 5121237).

#### *Regarding Claim 1,9,16,*

The Admission discloses (Figure 1) a first color pixel substrate (104), having a first surface and second surface, a second TFT substrate (102), having a third surface, a sealant (108) disposed between the second surface (surface at the bottom of 104) and third surface (top of 102). A liquid crystal layer (110) disposed among the second surface (surface at the bottom of 104) and the third surface (top of 102) and the sealant (108).

The Admission does not disclose the use of a light-shielding layer.

Ikeda et al discloses (column 1, row 40-54) using a light-shielding layer that shields the regions between picture element electrodes from light at high location accuracy.

(Column 2, Row 62-66).

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It would have been obvious to one of ordinary skill in the art, at the time of the invention to modify the admission's display device to include Ikeda et al's light shielding layer to shield the regions between picture element electrodes from light at high locational accuracy. (Ikeda et al, Column 2, Row 62-66).

Regarding Claim 2, 10,

In addition to the admission and Ikeda et al as disclosed above, Ikeda et al discloses the light-shielding layer is an ink. (column 1, row 40-54)

Regarding Claim 3, 12,

In addition to the admission and Ikeda et al as disclosed above, Ikeda et al discloses the light-shielding layer is a black ink. (column 1, row 40-54)

Regarding Claim 4, 13,

In addition to the admission and Ikeda et al as disclosed above, Ikeda et al discloses the light-shielding has a density of 2.5 or more which is more than 2.0. (Column 2, Rows 3-10).

Regarding Claim 5, 15

In addition to the admission and Ikeda et al as disclosed above, Ikeda et al discloses (Figure 1) the light-shielding layer (10) surrounding the display area and is in a shape of a frame.

Regarding Claim 6, 17

In addition to the admission and Ikeda et al as disclosed above, The admission discloses (Figure 1) a black matrix (106) disposed over a surface of a substrate also between the first substrate and the second substrate.

Regarding Claim 11,

In addition to the admission and Ikeda et al as disclosed above, Ikeda et al discloses the light-shielding layer is formed via a screen printing method. (column 1, row 40-54).

Regarding Claim 14,

In addition to the admission and Ikeda et al as disclosed above, Ikeda et al discloses (Figure 1) the light shield layer is disposed on a peripheral area outside the display area.

**Claim 7,8** are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art (admission) and of Ikeda et al (US 5121237) in view of Yoshimura et al (US 6618112).

Regarding Claim 7,

The admission and Ikeda et al do not disclose the light-shielding layer partially overlapping the black matrix layer.

Yoshimura et al discloses (Figure 75) the width of the light-shielding layer (R,B,G) partially overlaps the Black matrix (5).

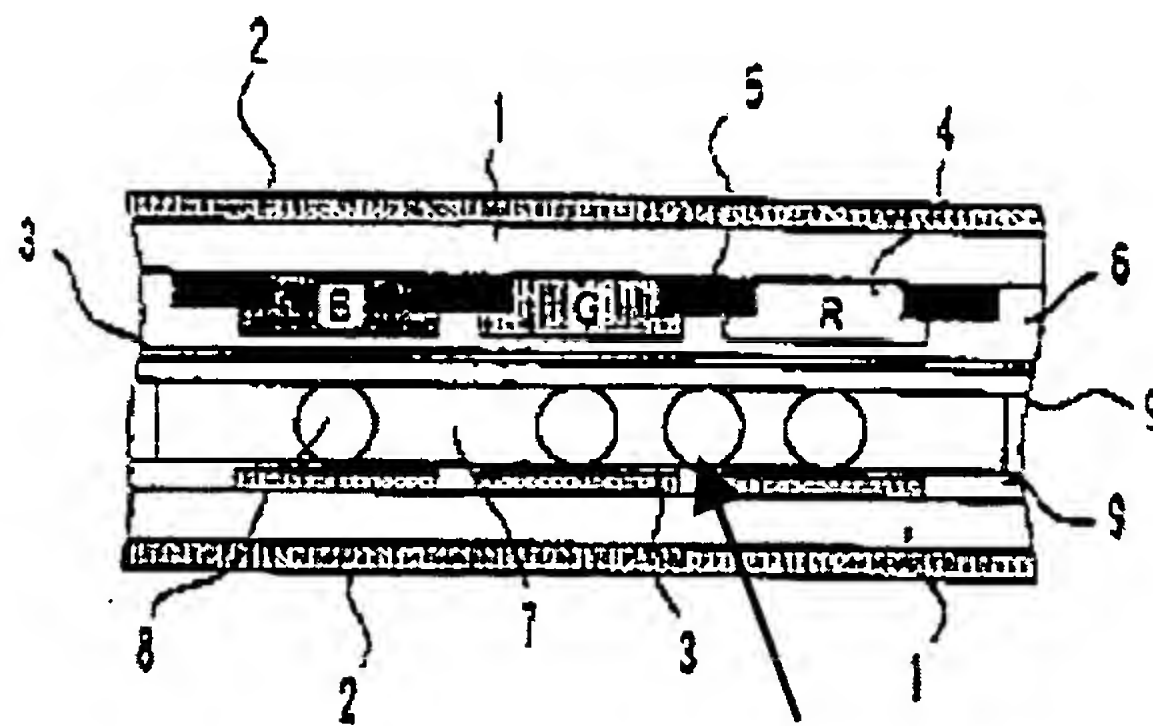
It would have been obvious to one of ordinary skill in the art, at the time of the invention to modify the admission's display device to include Ikeda et al's light shielding layer motivated by the desire to produce high contrast and high display uniformity.

(Column 3, Row 25-30)

Regarding Claim 8,

In addition to the admission, Ikeda et al, and Yoshimura et al as disclosed above, Yoshimura et al also discloses the light shielding layer (R, G, B) exposes a portion of the sealant (Shown below with an arrow pointing to it).

Fig. 75



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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy P. Chien whose telephone number is 571-272-8579. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lucy Chien  
Examiner  
Art Unit 2871  
LC

  
ROBERT H. KIM  
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